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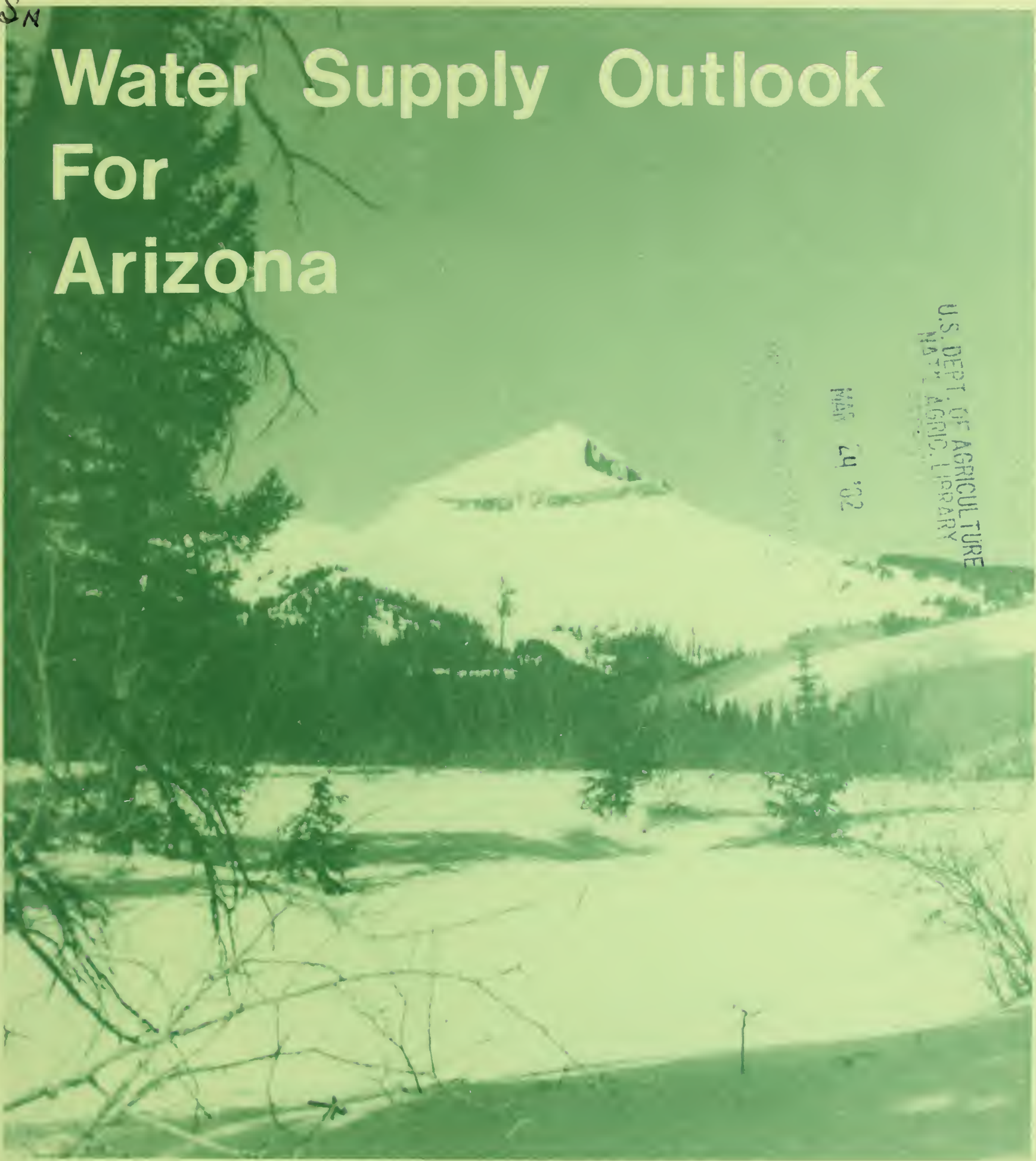
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# Water Supply Outlook For Arizona



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SALT RIVER VALLEY WATER USERS ASSOCIATION  
AND  
ARIZONA DEPARTMENT OF WATER RESOURCES

||||||| AS OF |||||  
**FEB. 1, 1982**  
|||||||



## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: "Lone cone, near Norwood, Colorado,  
Blanketed by its winter mantle of snow."*

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	P.O. Box 11350, Salt Lake City, Utah 84147
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



# **WATER SUPPLY OUTLOOK FOR ARIZONA**

**and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**

*Issued by*

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CHIEF  
SOIL CONSERVATION SERVICE  
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DIRECTOR  
ARIZONA DEPARTMENT OF  
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SALT RIVER VALLEY WATER  
USERS ASSOCIATION**

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*Report prepared by*

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ARIZONA STREAMFLOW FOR THE PERIOD FEBRUARY THROUGH MAY  
IS FORECAST TO BE GENERALLY BELOW AVERAGE.

### WATER SUPPLY

February-May forecasts are for generally below average streamflow for all major Arizona streams except the Verde River. The Verde River is forecast at 93% of average for this period. Other major streams are forecast to produce the following percents of average flow: Salt River, 62%; Tonto Creek, 64%; Gila River at Solomon, 46%; San Francisco River, 44%; and the upper Little Colorado River, 50% or less.

### SNOW COVER

January storms have greatly improved the Arizona-New Mexico snowpack compared to that which existed on January 1, 1982. Snow water equivalent as of February 1 is 194% of average on the Verde Watershed, 105% on the Salt River, 109% on the Little Colorado headwaters, and 76% of average on the Gila-San Francisco drainage. The majority of this snow was received during the first two weeks of January, but storm activity occurred periodically throughout the month.

### PRECIPITATION

January precipitation was well above average in most parts of the state. On the snow zone watersheds, January precipitation ranged from 235% of average on the Gila-San Francisco drainage to 280% of average on the Verde River Watershed. Total precipitation since November 1, 1981 is now near normal on the Gila Watershed and above average on the Verde, Salt, and Little Colorado Rivers.

### STREAMFLOW

January streamflow was below average. Inflow to the Salt River Project system was 90,800 acre-feet. The following table shows representative streamflow for January 1982.

<u>Stream</u>	<u>Flow - % of Average</u> <u>January</u>
Salt River	62%
Verde River	73%
Gila River at Solomon	48%
Gila River at Virden	62%
San Francisco at Clifton	35%

### RESERVOIR STORAGE

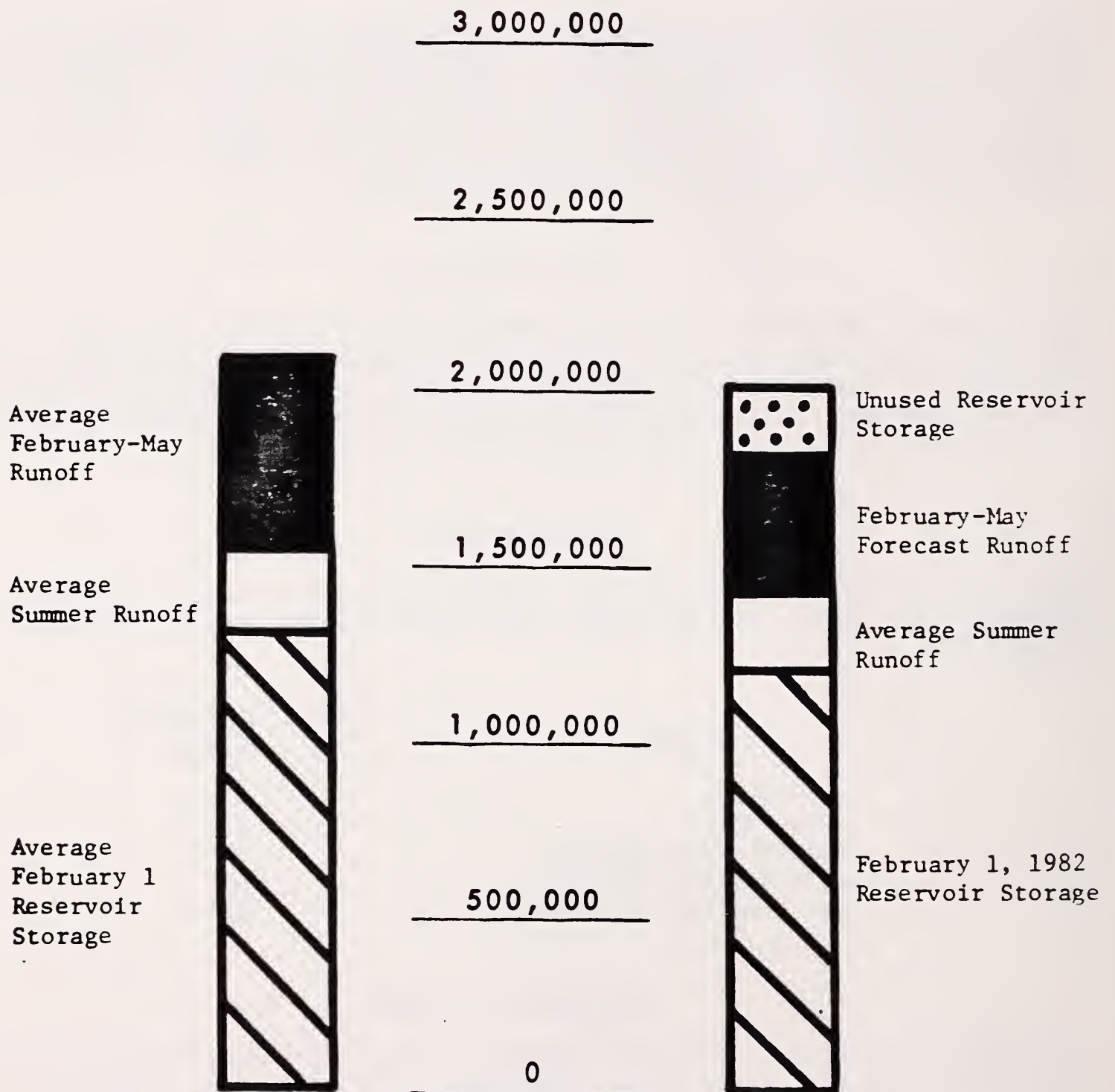
Most major reservoirs or reservoir systems are reporting near normal storage for February 1. Six Salt River Project reservoirs have a combined storage of 1,196,000 acre-feet at 59% of capacity. San Carlos Reservoir has 244,000 acre-feet, 26% of capacity. Lake Pleasant is 38% full, with 60,000 acre-feet. Combined storage in four major reservoirs on the Colorado River is currently 44,876,000 acre-feet, or 84% of capacity.

# WATER SUPPLY INVENTORY SALT RIVER VALLEY SYSTEM

IN ACRE-FEET

AVERAGE WATER SUPPLY  
ON FEBRUARY 1

ANTICIPATED WATER SUPPLY  
FEBRUARY 1, 1982



Based on Present Storage + Forecast Spring Runoff + Average Summer Runoff



ABOUT FEBRUARY  
1, 1982

**STREAMFLOW FORECASTS**

STREAMFLOW FORECASTS		1, 1982		THIS YEAR		PAST RECORD	
BASIN, STREAM and/or FORECAST POINT		FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET		
		Thousand Acre Feet	Percent of Average		Last Year	Average †	
<u>SALT RIVER DRAINAGE</u>							
Salt near Roosevelt		187	62	Feb-May	156.2	302.3	
"		30	61	February	15.7	49.3	
Tonto Creek near Roosevelt		27	64	Feb-May	12.6	42.3	
"		9.0	66	February	1.4	13.6	
Verde River above Horseshoe		172	93	Feb-May	79.9	184.0	
"		39	92	February	16.9	42.2	
Total Salt River Project Streams		386	73	Feb-May	248.7	528.6	
"		78	74	February	34.0	105.1	
<u>GILA RIVER DRAINAGE</u>							
Gila River at Calva		29	31	Feb-May	11.4	94.8	
Gila River near Gila		31	59	Feb-May	15.4	52.5	
Gila River near Solomon		60	46	Feb-May	36.2	130.0	
"		13	37	February	7.8	35.1	
Gila River near Virden		33	50	Feb-May	14.2	66.6	
Frisco River at Clifton		28	44	Feb-May	20.3	64.0	
Frisco River at Glenwood		13	44	Feb-May	7.1	29.8	
<u>LITTLE COLORADO RIVER DRAINAGE</u>							
Little Colo. River above Lyman Dam		3.9	35	Feb-June	3.0	11.1	
Greer		3.9	51	Feb-June	4.9	7.6	
<u>GRANITE CREEK DRAINAGE</u>							
Granite Creek		1.7	---	Feb-May	1.0	---	
Willow Creek		1.2	---	Feb-May	0.6	---	
<u>MIMBRES RIVER DRAINAGE</u>							
Mimbres River near Mimbres		1.5	---	Feb-May	0.7	---	
<u>COLORADO RIVER DRAINAGE</u>							
Virgin River near Littlefield		41	85	Apr-June	32.8	47.9	
Lake Mary Inflow		3.9	80	Feb-May	---	4.9	
† Based on 15-year period, 1963-77							
* Average for less than 15 years							

## RESERVOIR STORAGE (Thousand Acre Feet) FEBRUARY 1, 1982

BASIN or STREAM	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
<u>GILA RIVER DRAINAGE</u>					
Agua Fria	Lake Pleasant	157.6	60	103.5	71.1
Granite	Watson Lake	4.7	2.5	1.7	2.5
Granite	Willow Creek	6.1	0.9	0.8	2.5**
Gila	San Carlos	945.0	244	657.6	232.8
Gila	Painted Rock Dam	2,492	0	0	---
Salt (4)	Roosevelt, Apache, Canyon & Saguaro	1,709	1089	1,428	1,186
Verde (2)	Bartlett and Horseshoe	309.6	107	51.6	124.5
Salt and Verde	6 Salt River Project Reservoirs	2,019	1196	1,480	1,311
<u>COLORADO RIVER DRAINAGE</u>					
Colorado	Lake Havasu	619.4	543	553.9	543.8
Colorado	Lake Mohave	1,810	1643	1,696	1,658
Colorado	Lake Mead	26,159	23,083	23,457	17,576
Colorado	Lake Powell	25,002	19,608	23,831	10,038
Little Colorado	Lyman	30.6	---	23.4	15.0
Little Colorado	Show Low Lake	5.1	0.2	5.2	1.4
† Based on 15-year average, 1963-77					
* Average is for less than 15 years of record					

# BASIN SNOW COVER GOES WEST SATELLITE

JANUARY 26, 1982



## PREVIOUS SNOW COVER

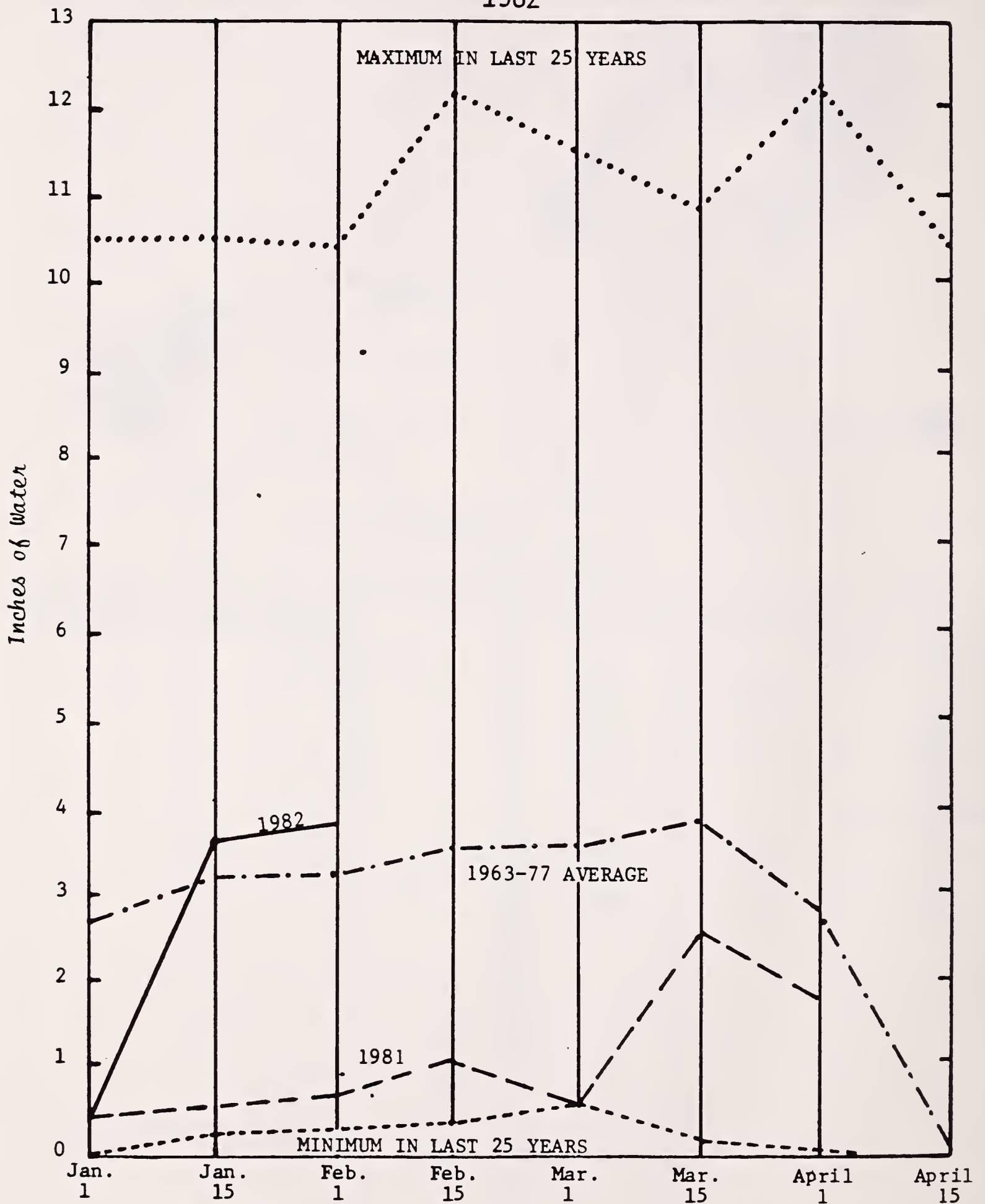
	VERDE RIVER	SALT RIVER		VERDE RIVER	SALT RIVER
December 1981					
2	36%	24%			
7	22%	8%			
8	14%	7%			
9	13%	4%			
10	2%	3%			
January 1982					
4	66%	57%			
13	56%	43%			
25	59%	18%			
26	55%	18%			



# ARIZONA

## AVERAGE SNOW COVER

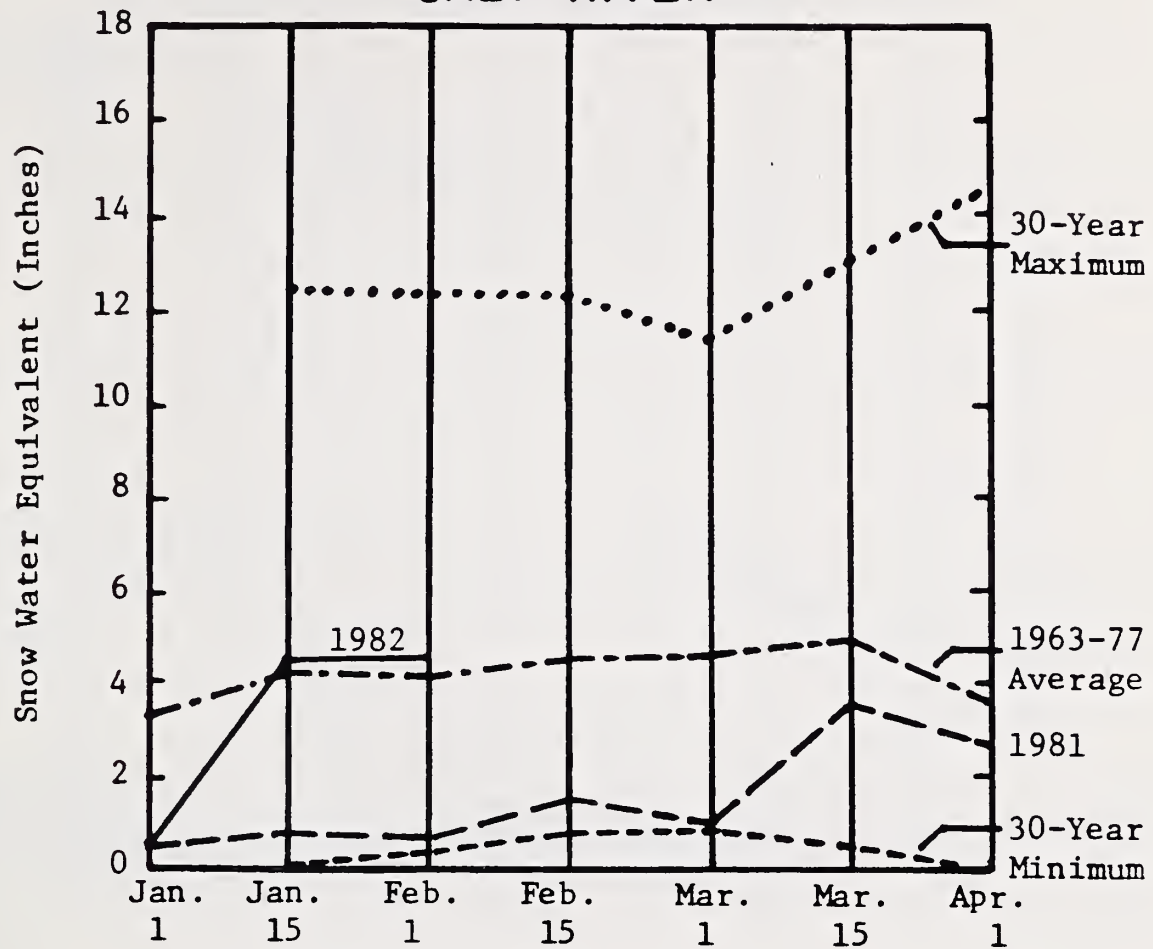
1982



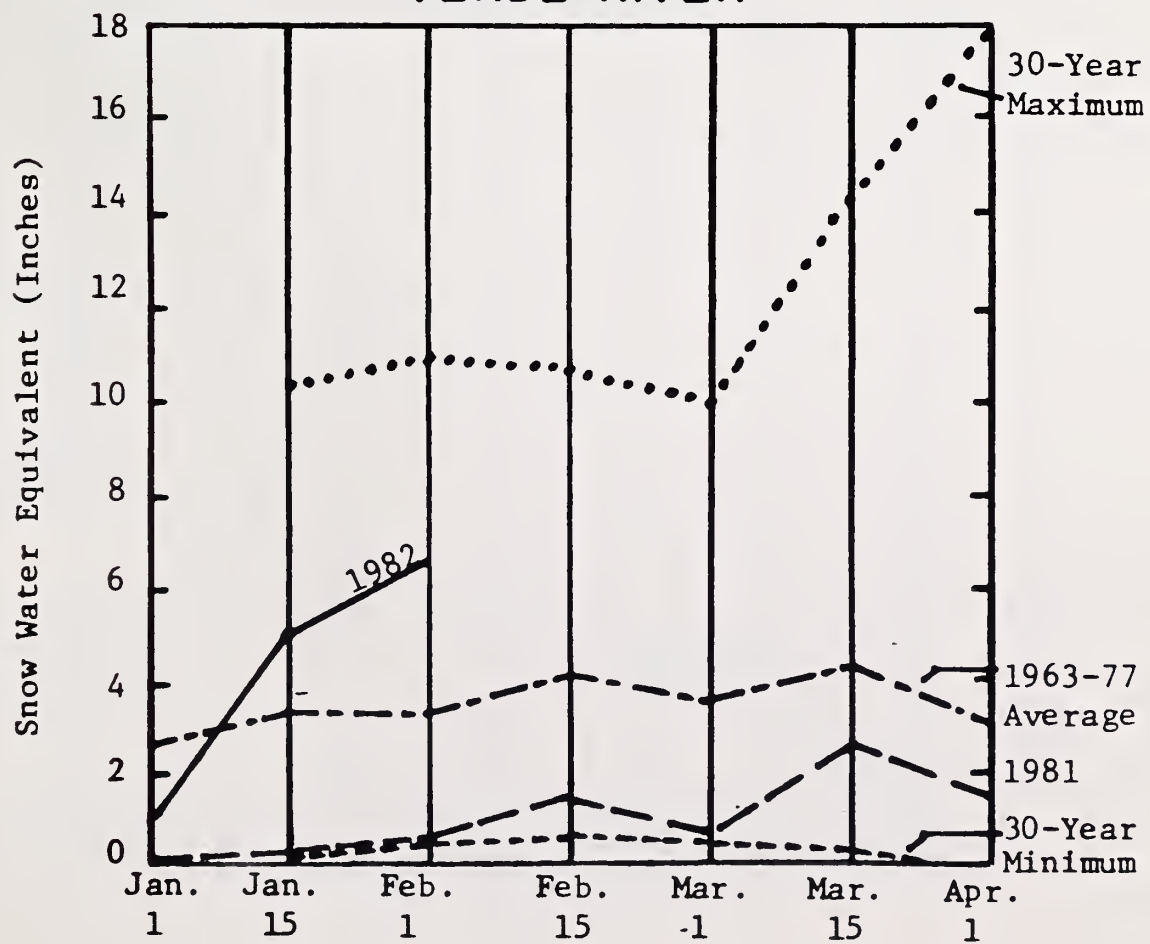
This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

# WATERSHED SNOW COVER

## SALT RIVER

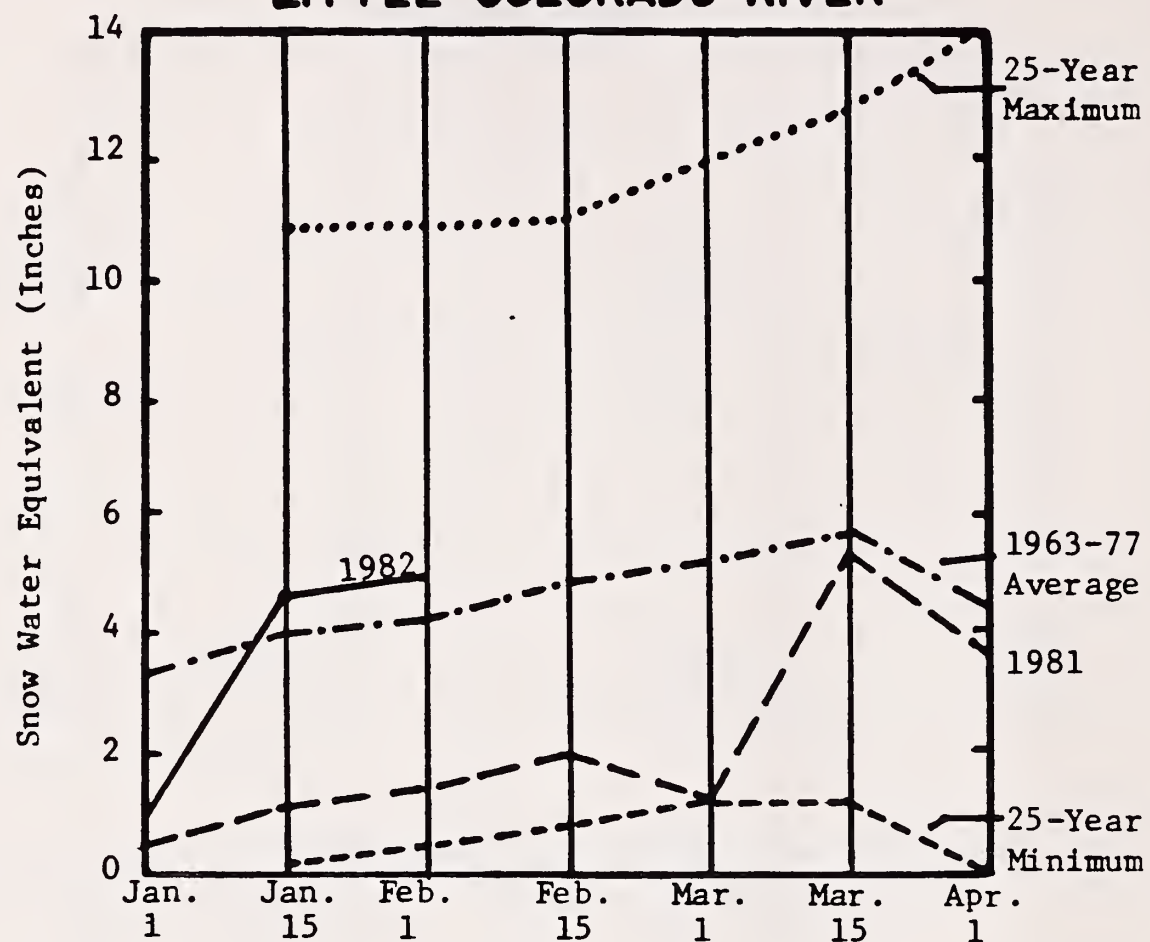


## VERDE RIVER

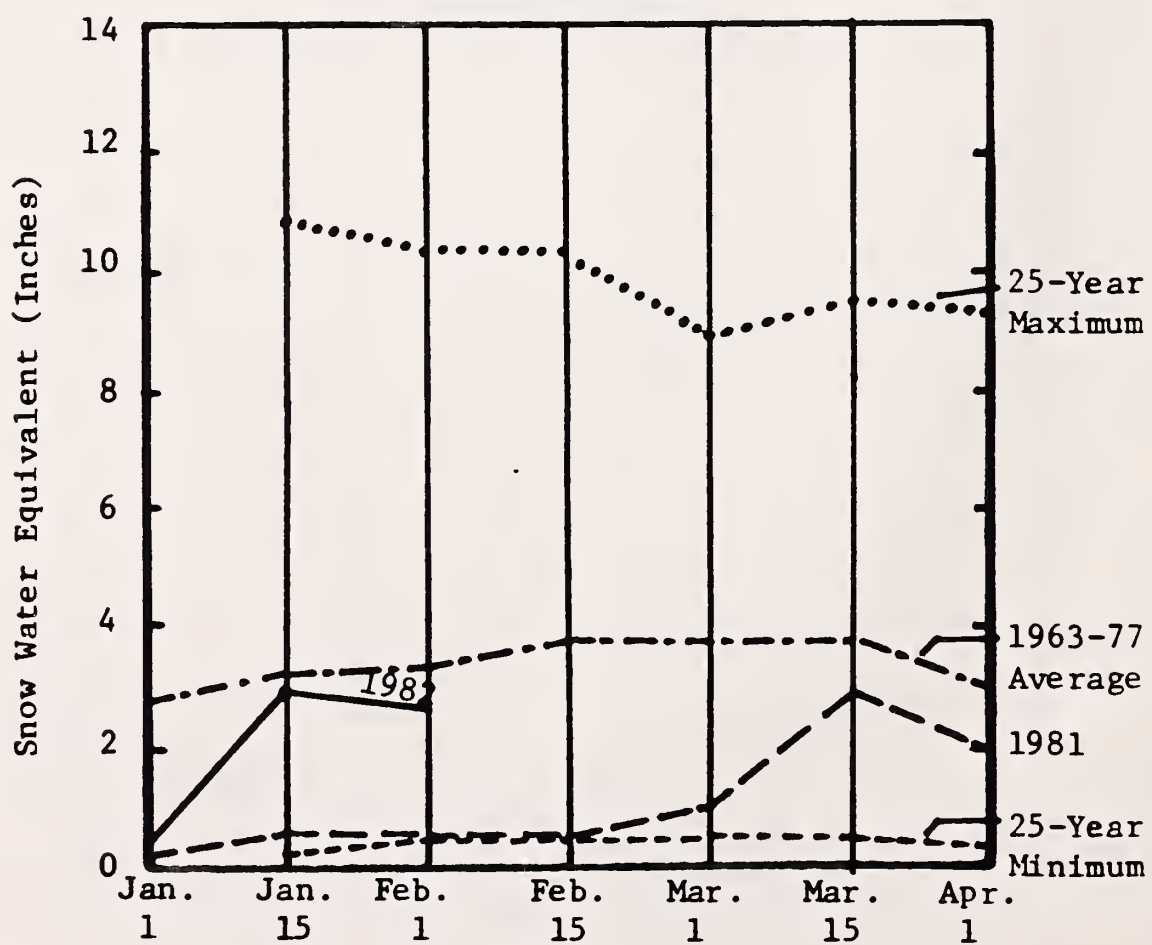


# WATERSHED SNOW COVER

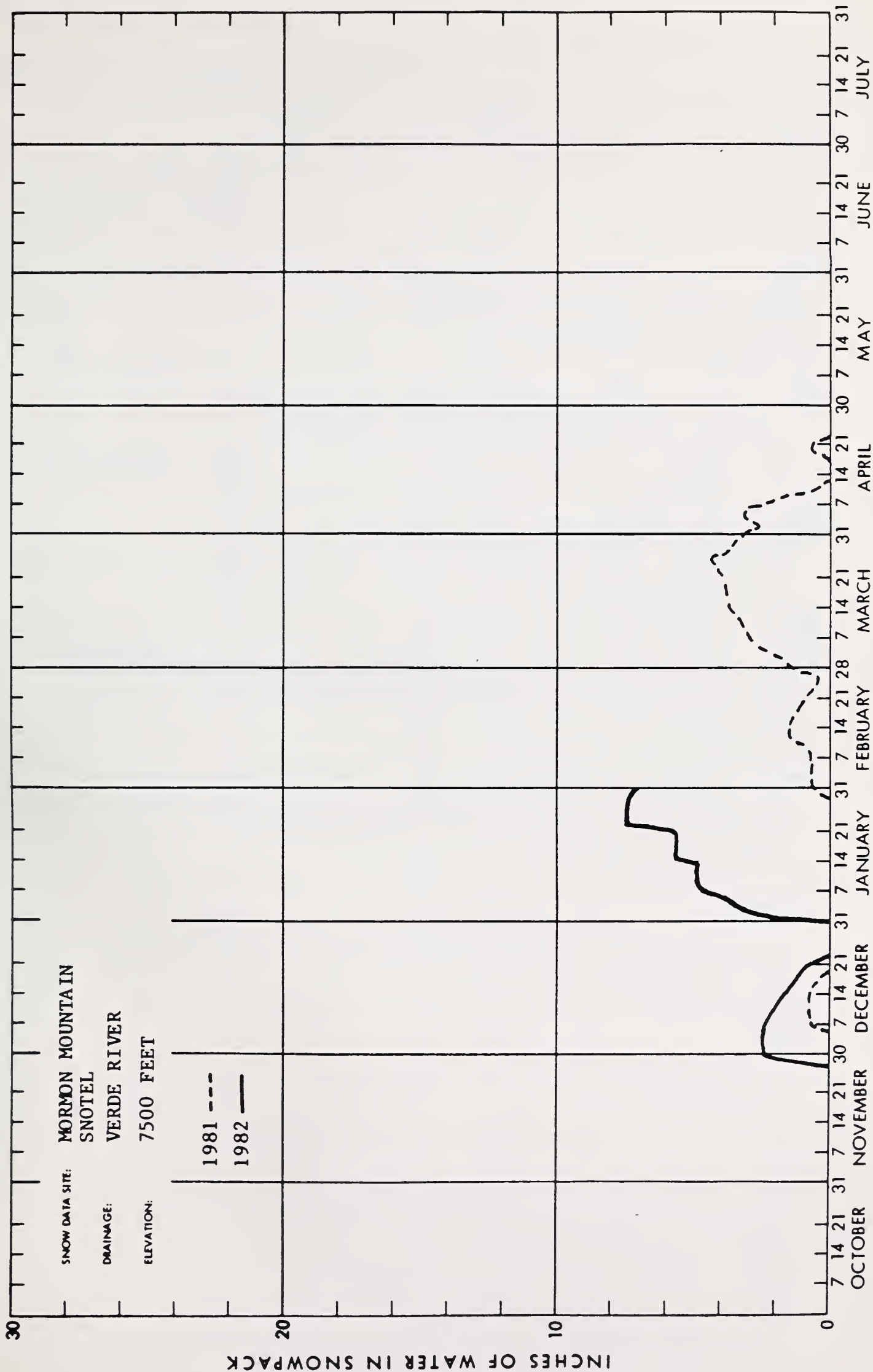
## LITTLE COLORADO RIVER



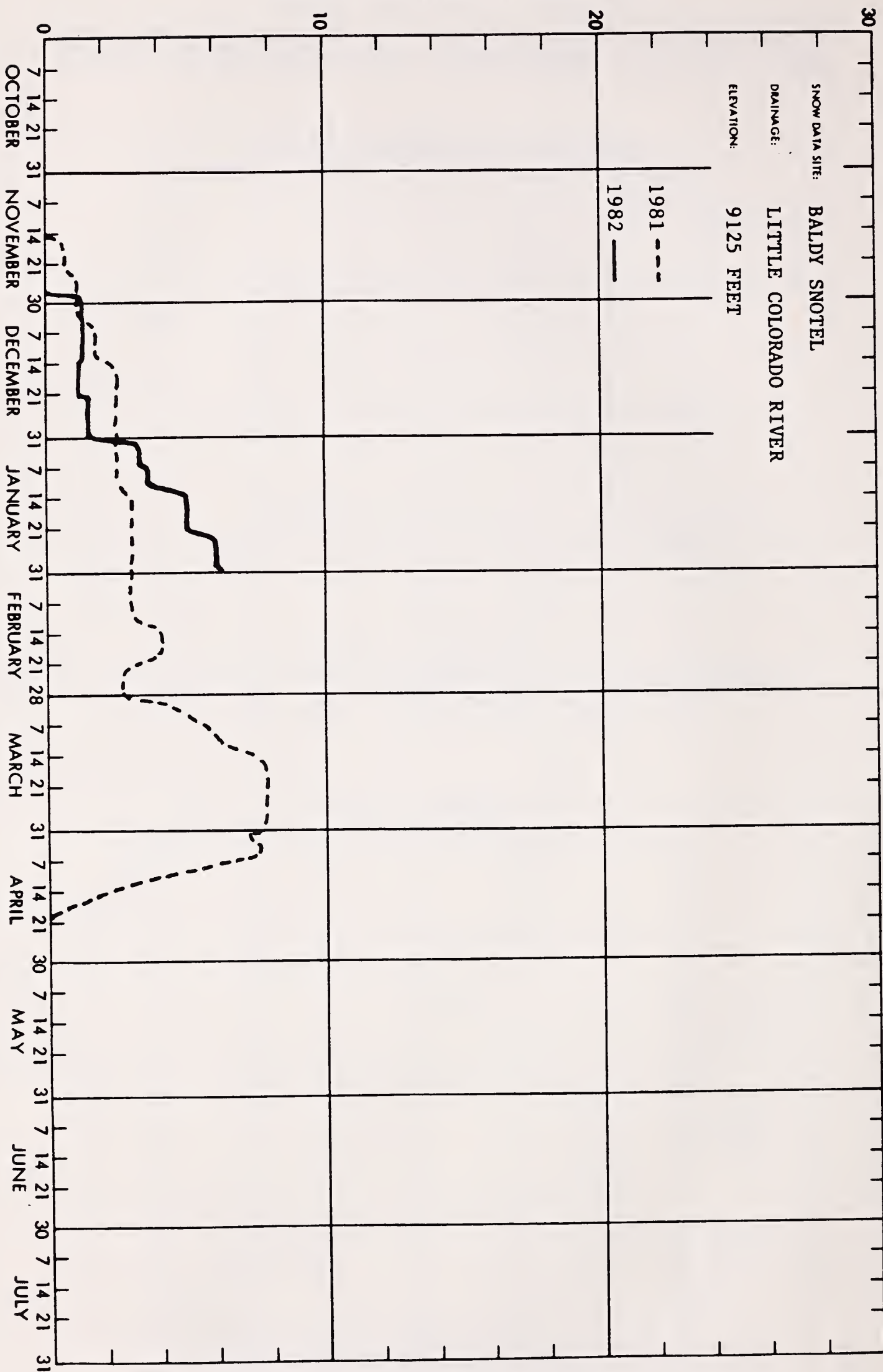
## GILA RIVER







INCHES OF WATER IN SNOWPACK



\*

**SUMMARY of SNOW MEASUREMENTS** (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average
<u>ABOUT JANUARY 15, 1982</u>			
Gila	10	725	85
Salt	10	717	108
Verde	10	2550	159
Little Colorado	5	418	112
<u>ABOUT FEBRUARY 1, 1982</u>			
Gila	10	650	76
Salt	10	716	105
Verde	10	1600	194
Little Colorado	5	369	109



**SNOW ABOUT FEBRUARY 1, 1982**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<b>SALT RIVER</b>						
Baldy *	9220	1/28	19	5.1	1.6	5.3
BALDY SNOTEL	9220	1/31	--	6.2	2.9	---
Beaver Head	8000	1/28	7	1.8	0.2	2.5
BONITO ROCK SNOTEL	8270	1/31	--	6.8	---	---
Canyon Creek	7500	1/28	15	4.9	0.1	3.5
Canyon Point	7600	1/28	23	6.4	0.1	3.8**
Coronado Trail	8400	1/28	8	2.4	0.0	2.4
CORONADO TRAIL SNOTEL	8400	1/31	--	2.9	0.0	---
Forest Dale	6430	1/28	3	0.8	0.0	1.1
Ft. Apache	9160	1/28	24	6.1	2.0	5.6
Hannagan Meadows	9090	1/28	22	6.0	0.9	6.8**
HANNAGAN MEADOWS SNOTEL	8960	1/31	--	7.0	3.9	---
Hawley Lake	8250	1/28	26	7.6	0.4	5.7**
HAWLEY LAKE SNOTEL	8250	1/31	--	7.4	0.0	---
Heber	7640	1/28	18	5.3	0.2	3.5
HEBER SNOTEL	7640	1/31	--	7.0	0.0	---
Maverick Fork	9050	1/28	21	5.7	1.0	6.4
MAVERICK FORK SNOTEL	9200	1/31	--	5.0	2.3	---
McNary	7225	1/28	12	3.4	0.0	2.2
MCNARY SNOTEL	7225	1/31	--	2.7	0.0	---
Milk Ranch	7000	1/28	5	1.6	0.0	1.2
Mt. Ord (A)	11000	NOT SCHEDULED			---	---
Nutriosio *	8500	1/28	5	1.2	0.0	1.8
Promontory Butte	7900	1/28	39	12.2	1.0	9.5**
PROMONTORY SNOTEL	7900	N O R E P O R T			1.3	---
Smith Cienega (A)	9850	NOT SCHEDULED			---	---
Sunrise Summit	10600	1/27	40	11.0	2.2	11.0**
Wilson Lake	9000	1/27	33	8.4	2.8	7.1**
Workman Creek	6900	1/28	18	5.2	0.0	5.0
WORKMAN CREEK SNOTEL	6900	1/31	--	6.0	0.0	---
<b>LOWER COLORADO RIVER</b>						
Bill Williams Intermediate	8550	N O R E P O R T			0.5	6.3**
Bill Williams Summit	8950	N O R E P O R T			1.0	7.5**
Chalender *	7100	1/28	21	5.7	0.1	2.3
Fort Valley	7350	1/28	14	4.2	0.3	1.7
Grand Canyon	7500	1/28	11	3.4	0.6	1.6
Williams Ski Run	7720	1/27	40	9.9	0.8	5.4**
Bright Angel	8400	1/28	26	7.1	0.0	---

† 1963-77 15-year period. (\*) Adjacent drainage. (\*\*) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.

**SNOW ABOUT FEBRUARY 1, 1982**

SNOW ABOUT FEBRUARY 1, 1982		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
GILA RIVER						
Bear Wallow	8100	1/30	21	9.1	---	3.4
Beaver Head	8000	1/28	7	1.8	0.2	2.5
Coronado Trail	8400	1/28	8	2.4	0.0	2.4
CORONADO TRAIL SNOTEL	8400	1/31	--	2.9	0.0	---
Emory Pass #1 *	7800	DISCONTINUED			0.0	0.7**
Emory Pass #2 *	7800	1/28	3	1.0	0.5	1.5**
Frisco Divide	8000	1/28	6	1.3	0.2	2.1
FRISCO DIVIDE SNOTEL	8000	1/31	--	2.7	0.2	---
Hannagan Meadows *	9090	1/28	22	6.0	0.9	6.8**
HANNAGAN MEADOWS SNOTEL	8960	1/31	--	7.0	3.9	---
Hummingbird (A)	10550	1/28	27	8.1	0.1	10.4**
LOOKOUT MOUNTAIN SNOTEL	8150	1/31	--	3.0	---	---
McKnight Cabin * (A)	9300	1/30	23	6.4	0.1	3.4**
Mogollon	7000	NO REPORT			0.0E	0.9
Nutriso	8500	1/28	5	1.2	0.0	1.8
Redstone Trail	8600	NO REPORT			1.0E	5.6
Rose Canyon	7300	1/30	13	6.6	---	2.1
SIGNAL PEAK SNOTEL	8360	1/31	--	7.2	0.6	---
Silver Creek Divide	9070	NO REPORT			1.4E	8.1**
SILVER CREEK SNOTEL	9070	1/31	--	6.2	1.4	---
State Line	8000	1/28	7	1.3	0.0	2.4
Whitewater (A)	10750	1/28	48	14.4	6.0	12.7**
VERDE RIVER						
Baker Butte	7330	1/27	18	6.0	0.2	5.1**
BAKER BUTTE SNOTEL	7330	1/31	--	5.8	0.2	---
Baker Butte #2	7700	1/27	36	10.9	0.6	8.2**
Camp Wood	5700	1/28	3	1.0	0.0	0.6
Chalender *	7100	1/28	21	5.7	0.1	2.3
Copper Basin Divide	6720	1/28	7	2.0	0.2	1.6
Fort Valley	7350	1/28	14	4.2	0.3	1.7
FRY SNOTEL	7200	1/31	--	7.9	0.2	---
Gaddes Canyon	7600	1/28	28	8.4	0.2	3.7
Happy Jack	7630	1/28	23	7.2	0.5	3.1
Iron Springs *	6200	1/28	1	0.3	0.0	0.6
Mingus Mountain	7100	1/28	4	1.8	0.1	0.7
Mormon Lake *	7350	1/28	24	7.1	0.3	3.7
Mormon Mountain	7500	1/28	28	8.4	0.3	4.4
MORMON MOUNTAIN SNOTEL	7500	1/31	--	7.1	0.3	---
Mormon Mtn. Summit #2	8470	NOT SCHEDULED			---	---
Newman Park	6750	1/28	17	5.1	0.1	2.0
Snow Bowl #1	10260	1/28	52	13.1	1.5	7.0
Snow Bowl #2	11000	1/28	36	9.3	3.9	10.9**
SUGAR LOAF SNOTEL	6120	1/31	--	0.8	0.0	---
White Horse Lake Jct.	7180	1/28	20	5.6	0.1	2.6**
WHITE HORSE LAKE SNOTEL	7180	1/31	--	7.2	0.0	---
White Spar	6000	1/28	2	0.6	0.0	0.5
† 1963-77 15-year period. (*) Adjacent drainage. (**) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.						

† 1963-77 15-year period. (\*) Adjacent drainage. (\*\*) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.



**SNOW ABOUT FEBRUARY 1, 1982**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<b>LITTLE COLORADO RIVER</b>						
Baldy	9220	1/28	19	5.1	1.6	5.3
BALDY SNOTEL	9220	1/31	--	6.2	2.9	---
Canyon Creek	7500	1/28	15	4.9	0.1	3.5
Canyon Point	7600	1/28	23	6.4	0.1	3.8**
Cheese Springs	8600	1/27	23	5.7	1.8	4.7**
Forest Dale	6430	1/28	3	0.8	0.0	1.1
Ft. Apache	9160	1/28	24	6.1	2.0	5.6
Fort Valley	7350	1/28	14	4.2	0.3	1.7
Happy Jack	7630	1/28	23	7.2	0.5	3.1
Heber	7640	1/28	18	5.3	0.2	3.5
HEBER SNOTEL	7640	1/31	--	7.0	0.0	---
Lake Mary	6970	1/28	19	5.0	0.2	---
McNary	7225	1/28	12	3.4	0.0	2.2
MCNARY SNOTEL	7225	1/31	--	2.7	0.0	---
Mormon Lake	7350	1/28	24	7.1	0.3	3.7
Mormon Mountain	7500	1/28	28	8.4	0.3	4.4
MORMON MOUNTAIN SNOTEL	7500	1/31	--	7.1	0.3	---
Mormon Mtn. Summit #2	8470	NOT SCHEDULED			---	---
Nutriosio *	8500	1/28	5	1.2	0.0	1.8
Promontory Butte	7900	1/28	39	12.2	1.0	9.5**
PROMONTORY SNOTEL	7900	N O R E P O R T			1.3	---
Snow Bowl #1	10260	1/28	52	13.1	1.5	7.0
Snow Bowl #2	11000	1/28	36	9.3	3.9	10.9**
Wilson Lake	9000	1/27	33	8.4	2.8	7.1**
† 1963-77 15-year period. (*) Adjacent drainage. (**) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.						



**SNOW ABOUT JANUARY 15, 1982**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<b>SALT RIVER</b>						
Baldy *	9220	1/14	22	5.4	1.5	4.7
BALDY SNOTEL	9220	1/15	--	5.1	2.9	---
Beaver Head	8000	1/14	10	2.8	0.4	2.8
BONITO ROCK SNOTEL	8270	1/15	--	5.6	---	---
Canyon Creek	7500	1/14	16	4.1	0.0	3.4
Canyon Point	7600	1/14	24	6.5	0.0	3.6**
Coronado Trail	8400	1/14	13	3.2	0.2	2.7
CORONADO TRAIL SNOTEL	8400	1/15	--	2.5	0.0	---
Forest Dale	6430	1/14	6	1.3	0.0	1.8
Ft. Apache	9160	1/14	25	5.6	1.7	4.9
Hannagan Meadows	9090	1/14	25	6.1	1.3	5.8**
HANNAGAN MEADOWS SNOTEL	8960	1/15	--	5.9	3.6	---
Hawley Lake	8250	1/14	26	6.3	0.6	4.8**
HAWLEY LAKE SNOTEL	8250	1/15	--	5.9	1.4	---
Heber	7640	1/14	20	5.1	0.0	3.5
HEBER SNOTEL	7640	1/15	--	5.5	0.3	---
Maverick Fork	9050	1/14	--	4.3E	---	5.6
MAVERICK FORK SNOTEL	9200	1/14	--	4.3	1.5	---
McNary	7225	1/14	13	2.9	0.0	2.7
MCNARY SNOTEL	7225	1/15	--	2.8	0.0	---
Milk Ranch	7000	1/14	8	1.8	0.0	1.9
Mt. Ord (A)	11000	NOT SCHEDULED			---	---
Nutriso *	8500	1/14	--	1.3	0.0	2.1
Promontory Butte	7900	1/15	36	10.9	0.9	7.0**
PROMONTORY SNOTEL	7900	NO REPORT			1.3	---
Smith Cienega (A)	9850	NOT SCHEDULED			---	---
Sunrise Summit	10600	1/13	45	9.5	1.4	9.8**
Wilson Lake	9000	1/13	34	7.6	2.1	6.1**
Workman Creek	6900	1/15	21	4.9	---	5.0
WORKMAN CREEK SNOTEL	6900	1/15	--	5.8	0.5	---
<b>LOWER COLORADO RIVER</b>						
Bill Williams Intermediate	8550	1/19	32	8.2	0.0	5.2**
Bill Williams Summit	8950	1/19	32	7.9	1.4	6.1**
Bright Angel	8400	1/14	27	5.1	0.6	---
Chalender *	7100	1/14	16	4.0	0.0	2.3
Fort Valley	7350	1/14	15	3.4	0.0	1.6
Grand Canyon	7500	1/16	10	2.6	---	1.9
Williams Ski Run	7720	1/13	33	7.2	0.0	4.6**

† 1963-77 15-year period. (\*) Adjacent drainage. (\*\*) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.

# SNOW ABOUT JANUARY 15, 1982

SNOW ABOUT JANUARY 15, 1982		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
GILA RIVER						
Bear Wallow	8100	1/15	21	8.0	0.0	3.2
Beaver Head	8000	1/14	10	2.8	0.4	2.8
Coronado Trail	8400	1/14	13	3.2	0.2	2.7
CORONADO TRAIL SNOTEL	8400	1/15	--	2.5	0.0	---
Emory Pass #1 *	7800	D I S C O N T I N U E D			0.2	1.0**
Emory Pass #2 *	7800	1/14	5	1.2	0.3	1.7**
Frisco Divide	8000	1/14	8	1.3	0.3	2.4
FRISCO DIVIDE SNOTEL	8000	1/15	--	2.1	0.5	---
Hannagan Meadows *	9090	1/14	25	6.1	1.3	5.8**
HANNAGAN MEADOWS SNOTEL	8960	1/15	--	5.9	3.6	---
Hummingbird (A)	10550	NOT SCHEDULED			---	9.3**
LOOKOUT MOUNTAIN SNOTEL	8150	1/15	--	2.6	---	---
McKnight Cabin * (A)	9300	NOT SCHEDULED			---	3.4**
Mogollon	7000	NO SURVEY			---	1.4
Nutrioso	8500	1/14	--	1.3	0.0	2.1
Redstone Trail	8600	NO SURVEY			---	5.2
Rose Canyon	7300	1/15	12	4.8	0.0	2.1
SIGNAL PEAK SNOTEL	8360	1/15	--	6.6	0.0	---
Silver Creek Divide	9070	NO SURVEY			---	7.2**
SILVER CREEK SNOTEL	9070	1/15	--	5.8	1.0	---
State Line	8000	1/14	10	1.6	0.1	2.5
Whitewater (A)	10750	NOT SCHEDULED			---	11.0**
VERDE RIVER						
Baker Butte	7330	1/14	17	5.6	0.0	4.6**
BAKER BUTTE SNOTEL	7330	1/15	--	4.2	0.0	---
Baker Butte #2	7700	1/14	32	9.9	0.3	6.8**
Camp Wood	5700	1/14	T	0.2	0.0	0.9
Chalender *	7100	1/14	16	4.0	0.0	2.3
Copper Basin Divide	6720	1/14	4	1.2	0.0	2.0
Fort Valley	7350	1/14	15	3.4	0.0	1.6
FRY SNOTEL	7200	1/15	--	5.1	0.0	---
Gaddes Canyon	7600	1/14	17	6.3	0.0	3.6
Happy Jack	7630	1/14	21	5.8	0.0	3.0
Iron Springs *	6200	1/14	1	0.6	0.0	0.7
Mingus Mountain	7100	1/14	4	1.1	0.0	1.1
Mormon Lake *	7350	1/14	20	5.8	0.2	3.5
Mormon Mountain	7500	1/14	24	6.9	0.0	4.1
MORMON MOUNTAIN SNOTEL	7500	1/15	--	5.5	0.0	---
Mormon Mtn. Summit #2	8470	NOT SCHEDULED			---	---
Newman Park	6750	1/14	16	4.8	0.0	2.4
Snow Bowl #1	10260	1/14	47	10.8	1.3	6.0
Snow Bowl #2	11000	1/14	34	8.7	3.3	9.2**
SUGAR LOAF SNOTEL	6120	1/15	--	3.2	0.0	---
White Horse Lake Jct.	7180	1/13	17	4.5	0.0	2.4**
WHITE HORSE LAKE SNOTEL	7180	1/15	--	7.1	0.0	---
White Spar	6000	1/14	1	0.3	0.0	1.0
† 1963-77 15-year period. (*) Adjacent drainage. (**) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.						

† 1963-77 15-year period. (\*) Adjacent drainage. (\*\*) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.



# SNOW ABOUT JANUARY 15, 1982

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<u>LITTLE COLORADO RIVER</u>						
Baldy	9220	1/14	22	5.4	1.5	4.7
BALDY SNOTEL	9220	1/15	—	5.1	2.9	---
Canyon Creek	7500	1/14	16	4.1	0.0	3.4
Canyon Point	7600	1/14	24	6.5	0.0	3.6**
Cheese Springs	8600	1/13	24	4.5	1.6	4.2**
Forest Dale	6430	1/14	6	1.3	0.0	1.8
Ft. Apache	9160	1/14	25	5.6	1.7	4.9
Fort Valley	7350	1/14	15	3.4	0.0	1.6
Happy Jack	7630	1/14	21	5.8	0.0	3.0
Heber	7640	1/14	20	5.1	0.0	3.5
HEBER SNOTEL	7640	1/15	--	5.5	0.3	---
Lake Mary	6970	1/14	15	3.3	0.0	---
McNary	7225	1/14	13	2.9	0.0	2.7
MCNARY SNOTEL	7225	1/15	--	2.8	0.0	---
Mormon Lake	7350	1/14	20	5.8	0.2	3.5
Mormon Mountain	7500	1/14	24	6.9	0.1	4.1
MORMON MOUNTAIN SNOTEL	7500	1/15	--	5.5	0.0	---
Mormon Mountain Summit #2	8470	NOT SCHEDULED			---	---
Nutriosio *	8500	1/14	--	1.3	0.0	2.1
Promontory Butte	7900	1/15	36	10.9	0.9	7.0**
PROMONTORY SNOTEL	7900	NO REPORT			1.3	---
Snow Bowl #1	10260	1/14	47	10.8	1.3	6.0
Snow Bowl #2	11000	1/14	34	8.7	3.3	9.2**
Wilson Lake	9000	1/13	34	7.6	2.1	6.1**

† 1963-77 15-year period. (\*) Adjacent drainage. (\*\*) 1963-77 Adjusted Average. (A) Aerial observation: water content estimated. Snotel data is edited.

## PRECIPITATION (Inches) ABOUT FEBRUARY 1, 1982

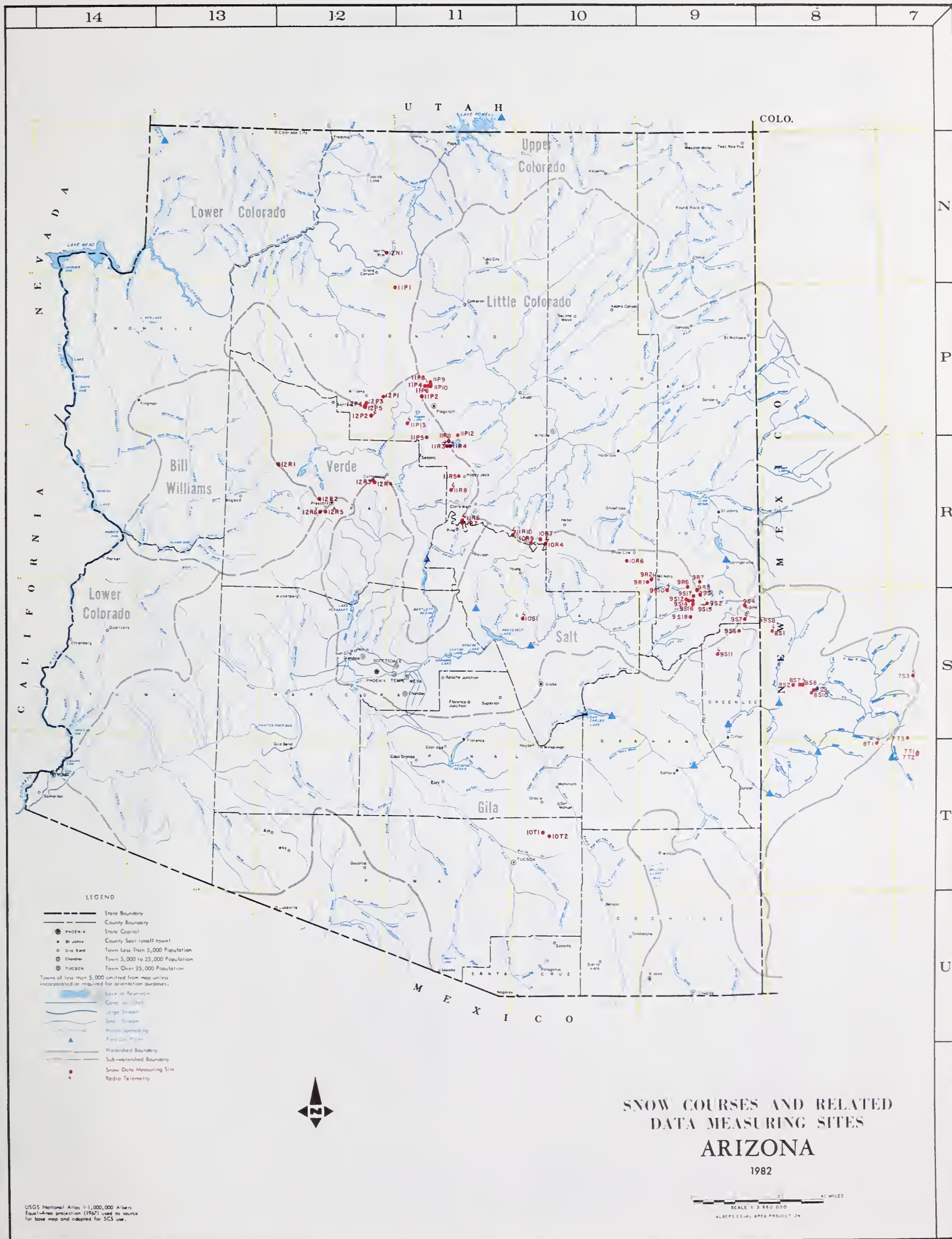
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. NOV 1 TO DATE		
		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	---	---	2.07*	---	8.26*	---
Hannagan Meadows **	9030	1/28	5.60	2.30	7.00	7.36	95
Frisco Divide **	8000	1/28	2.20	1.02	3.00	3.32	90
<u>SALT RIVER</u>							
Canyon Point	7600	1/28	8.25	2.96*	12.21	10.13*	121
Hannagan Meadows **	9030	1/28	5.60	2.30	7.00	7.36	95
Little Wildcat (Heber Snow Course)	7600	1/28	7.21	2.65	11.02	9.02	122
Maverick Fork	9050	1/28	5.70	2.39	7.20	7.72	93
Workman Creek **	6970	1/28	8.46	3.30	14.26	10.18	140
Wilson Lake	9100	1/27	6.40	1.98*	7.70	7.00*	100
<u>VERDE RIVER</u>							
Baker Butte	7300	1/27	6.33	2.70*	10.98	9.52*	115
Copper Basin Divide	6720	1/28	3.83	1.75	7.98	6.80	117
Fort Valley **	7350	1/28	4.33	1.44	6.49	5.22	124
Happy Jack **	7480	1/28	7.51	2.23	10.43	7.12	146
Mingus Mountain	7660	1/28	4.24	1.45	7.82	5.12	153
Mormon Mountain	7500	1/28	9.29	2.89	12.80	10.44	127
White Horse Lake Jct.**	7150	1/28	6.40	2.40	10.10	7.30	138
<u>LITTLE COLORADO</u>							
Greer Lakes	8500	1/28	2.50	.95	3.20	3.92	82
Little Wildcat (Heber Snow Course)	7600	1/28	7.21	2.65	11.02	9.02	122
Sheep Crossing (Baldy Snow Course)	9125	1/28	5.30	2.02	7.32	6.93	106
1963-77 Average							
* Adjusted Average							
** Data Supplied by U. S. Forest Service							



## PRECIPITATION (Inches) ABOUT FEBRUARY 1, 1982 (SNOTEL SITES)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX NOV 1 TO DATE		
		Date of Reading	Month's Precipitation	Average †	This Year	Average †	Percent of Average
<u>GILA RIVER</u>							
Coronado Trail	8400	1/31	3.4	---	4.5	---	---
Hannagan Meadows	8960	1/31	6.3	---	7.6	---	---
Frisco Divide	8000	1/31	2.7	---	3.6	---	---
Silver Creek Divide	9000	1/31	5.7	---	7.8	---	---
Lookout Mountain	8150	1/31	3.6	---	4.9	---	---
Signal Peak	8360	1/31	6.2	---	9.0	---	---
<u>SALT RIVER</u>							
Promontory Butte	7930	---	---	---	---	---	---
Heber	7640	1/31	7.4	---	11.3	---	---
Hawley Lake	8250	1/31	7.6	---	10.1	---	---
McNary	7200	1/31	4.8	---	6.9	---	---
Bonito Rock	8270	1/31	8.3	---	10.3	---	---
Hannagan Meadows	8960	1/31	6.3	---	7.6	---	---
Maverick Fork	9050	1/31	5.8	---	7.3	---	---
Coronado Trail	8400	1/31	3.4	---	4.5	---	---
Workman Creek	6900	1/31	9.5	---	15.9	---	---
<u>VERDE RIVER</u>							
White Horse Lake Jct.	7180	1/31	6.5	---	10.4	---	---
Fry	7200	1/31	6.8	---	10.4	---	---
Mormon Mountain	7500	1/31	8.6	---	11.2	---	---
Sugar Loaf	6120	1/31	5.1	---	7.8	---	---
Baker Butte	7300	1/31	6.3	---	11.3	---	---
<u>LITTLE COLORADO</u>							
Baldy	9125	1/31	5.6	---	7.3	---	---
McNary	7200	1/31	4.8	---	6.9	---	---
Heber	7640	1/31	7.4	---	11.3	---	---
Promontory Butte	7930	---	---	---	---	---	---
Snotel data edited							







# INDEX TO SNOW COURSES

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	DRAINAGE	OBSERVER	RECORD BEGAN
11P10A	Agassiz	32	23N	7E	11200	Little Colorado	SCS-CF*	1968
11R6PSPRT	Baker Butte	4	12N	9E	7300	Verde	SCS	1966
11R7	Baker Butte #2	9	12N	9E	7700	Verde	SCS	1971
9S1APSPRT	Baldy	28	7N	27E	9125	Little Colorado	SCS	1950
9S15	Baldy #2	12	6N	26E	9750	Little Colorado	SCS	1963
9S16	Baldy #3	13	6N	26E	10950	Little Colorado	SCS	1963
10T1	Bear Wallow	6	12S	16E	8100	Gila	FS	1948
9S6	Beaver Head	13	4N	30E	8000	San Francisco	FS	1938
12P5	Bill William Intermediate	17	21N	2E	8550	Cataract	FS	1967
12P4	Bill Williams Summit	17	21N	2E	8950	Verde	FS	1967
9S18PSPRT	Bonito Rock		5N	26E	8270	Salt	SCS	1979
12N1	Bright Angel	34	33N	3E	8400	Bright Angel Creek	NPS	1947
12R1	Camp Wood	3	16N	6W	5700	Verde	FS	1946
10R7	Canyon Creek #2	18	11N	15E	7500	Little Colorado	SCS	1958
10R9P	Canyon Point	28	11N	14E	7600	Salt	SCS	1967
12P1	Chalender	27	22N	3E	7100	Verde	FS	1947
9R7	Cheese Springs	28	8N	27E	8600	Little Colorado	SCS	1969
12R6P	Copper Basin Divide	23	13N	3W	6720	Verde	SCS	1963
9S7PSPRT	Coronado Trail	26	5N	30E	8000	San Francisco	FS	1938
7T1	Emory Pass #1	16	16S	9W**	7800	Mimbres	SCS	1967
7T2	Emory Pass #2	16	16S	9W**	7800	Mimbres	SCS	1967
11P13PSPRT	Fry	35	20N	5E	7220	Verde	SCS	1978
10R6	Forest Dale	2	9N	21E	6430	Salt	BIA	1939
9R5	Ft. Apache	18	7N	27E	9160	Little Colorado	SCS	1951
11P2P	Ft. Valley	22	22N	6E	7350	Little Colorado	FS	1947
8S1PSPRT	Frisco Divide	31	6S	20W**	8000	San Francisco	FS	1938
12R4	Gaddes Canyon	11	15N	2E	7600	Verde	SCS	1954
11P1	Grand Canyon	21	30N	4E	7500	Hance Creek	NPS	1947
9S11PSPRT	Hannagan Meadows	19	3N	29E	9090	San Francisco	FS	1964
11R5P	Happy Jack	30	16N	9E	7630	Verde	FS	1951
9R10PSPRT	Hawley Lake	13	7N	24E	8300	Salt	BIA	1966
10R4PSPRT	Heber	28	11N	15E	7600	Little Colorado	SCS	1950
8S9A	Hummingbird	19	11S	17W**	10550	Gila	SCS	1964
11P9P	Inner Basin #1	28	23N	7E	10000	Little Colorado	SCS-CF*	1967
11P8P	Inner Basin #2	28	23N	7E	9750	Little Colorado	SCS	1967
12R2	Iron Springs	22	14N	3W	6200	Little Colorado	SCS	1946
11P12	Lake Mary	21	19N	9E	6930	Little Colorado	SCS	1975
7S3PSPRT	Lookout Mountain	1	10S	10W	8500	Gila	SCS	1978
9S2APSPRT	Maverick Fork	13	6N	27E	9150	Salt	SCS	1950
7T3A	McKnight Cabin	10	15S	10W**	9300	Mimbres	SCS	1967
9R2PSPRT	McNary	23	8N	23E	7200	Salt	BIA	1939
9R1	Milk Ranch	33	8N	23E	7000	Salt	BIA	1941
12R3	Mingus Mountain	3	15N	2E	7100	Verde	SCS	1947
8S2	Mogollon	2	11S	19W**	7000	San Francisco	SCS	1953
11R4	Mormon Lake	13	18N	8E	7350	Little Colorado	SCS	1947
11R3APSPRT	Mormon Mountain	14	18N	8E	7500	Verde	SCS	1950
11R11	Mormon Mountain Summit #2	2	18N	8E	8470	Little Colorado	SCS	1975
9S12A	Mt. Ord	4	6N	26E	11200	Salt	SRP-SCS	1966
11P5	Newman Park	25	19N	6E	6750	Verde	SCS	1963
9S4	Nutrioso	23	6N	30E	8500	San Francisco	FS	1938
11R10PSPRT	Promontory Butte	5	11N	13E	7930	Little Colorado	SCS	1973
8S7	Redstone Trail	5	11S	18W**	8600	San Francisco	SCS	1961
10T2	Rose Canyon	15	12S	16E	7300	Gila	FS	1948
8T1PSPRT	Signal Peak	13	16S	13W	8360	Gila	SCS	1977
8S8PSPRT	Silver Creek Divide	4	11S	18W**	9000	San Francisco	SCS	1964
9S14A	Smith Cienega	10	6N	26E	10050	Salt	SRP-SCS	1966
11P4	Snow Bowl #1	36	23N	6E	10260	Verde	FS	1961
11P6	Snow Bowl #2	31	23N	7E	11000	Verde	FS	1965
9S8	State Line	6	6S	21W**	8000	San Francisco	FS	1938
9S17	Sunrise Summit	36	7N	26E	10600	Salt	SCS	1972
11R8PSPRT	Sugarloaf	8	8E	14N	6120	Verde	SCS	1978
12P2PSPRT	White Horse Lake Jct.	2	20N	2E	7180	Verde	FS	1967
12R5	White Spar	19	13N	2W	6000	Verde	SCS	1963
8S10A	Whitewater	19	11S	17W**	10750	Gila	SCS	1964
12P3	Williams Ski Run	9	21N	2E	7720	Cataract	FS	1967
9R6P	Wilson Lake	4	7N	26E	9000	Salt	SCS	1966
10S1PSPRT	Workman Creek	33	6N	14E	6900	Salt	FS	1952

A Aerial Snow Depth Marker  
P Precipitation Storage Gage  
R Radio Telemetry (SNOTEL)

SP Snow Pressure Pillow  
T Temperature  
\*\* NM Principal Meridian  
\* City of Flagstaff



## The Following Organizations Cooperate in the Arizona Snow Survey Work

### FEDERAL

- Department of Agriculture
  - Soil Conservation Service
  - Forest Service
    - Apache-Sitgreaves Forest
    - Coconino Forest
    - Coronado Forest
    - Gila Forest
    - Kaibab Forest
    - Prescott Forest
    - Rocky Mountain Forest and Range Experiment Station
    - Tonto Forest
- Department of Commerce
  - NOAA, National Weather Service
- Department of Interior
  - Bureau of Reclamation
    - Region 111
  - Geological Survey
    - Arizona District
    - New Mexico District
  - Bureau of Indian Affairs
    - Fort Apache Reservation
    - San Carlos Irrigation Project
  - National Park Service
    - Grand Canyon National Park
- Gila Water Commissioner
  - Safford, Arizona

### STATE

- Arizona Game and Fish Department
- Arizona State Parks Board
- Arizona Department of Water Resources
- University of Arizona
  - Arizona Agricultural Experiment Station
  - Water Resource Research Center
  - Department of Watershed Management

### MUNICIPAL

- City of Flagstaff

### IRRIGATION PROJECTS

- Salt River Valley Water User's Association
  - Phoenix, Arizona
- San Carlos Irrigation and Drainage District
  - Coolidge, Arizona
- Maricopa County Municipal Water Conservation District

### PRIVATE

- Southwest Forest Industries, Inc.
  - McNary, Arizona
- Fort Apache Indian Reservation
  - White Mountain Recreation Enterprises

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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with the Snow Survey"*